

## **Section 9. Literature Cited**

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- Allan, J. D. 1995. Stream Ecology-- Structure and function of running waters. 1st ed. Chapman & Hall. xii, 388pp.
- American Fisheries Society, 2001. AFS: Nutrient Conference 2001. Eugene, Oregon.
- Anderson, D.G. 1988. Juvenile Salmonid Habitat of the Redwood Creek Basin, Humboldt County, California. M.S. Thesis. Humboldt State University, Arcata, CA. 99p.
- Anderson, H. W. 1971. Relative contributions of sediment from source areas and transport processes. Proc. Symp. Forest Land Uses and Stream Environment, Corvallis, Ore. 1970: 55-63.
- Bates, K.M. 1992. Fishway design guidelines for Pacific salmon. Washington Department of Fish and Wildlife, Working Paper 1.5, 11/94.
- Bell, M. C., 1973. Temperature – Effects on fish. In Fisheries handbook of engineering requirements and biological criteria. Fish Passage Development and Evaluation Program, Corps of Engineers, North Pacific Division, Portland, Oregon. Pages 92-101.
- Benda, L. and T. Dunne, 1997a. Stochastic forcing of sediment supply to channel networks from landsliding and debris flow. Water Resources Research. 33(12):2849-2863.
- Benda, L. and T. Dunne. 1997b. Stochastic forcing of sediment routing and storage in channel networks. Water Resources Research, 33(12):2865-2880.
- Beschta, R.L. 1978. Long-term patterns of sediment production following road construction and logging in the Oregon Coast Range. Water Resources Research. 14(6):1011-1016.
- Beschta, R.L., Pyles, M.R., Skaugset, A.E., and Surfleet, C.G., 2000, Peakflow responses to forest practices in the western cascades of Oregon.: Journal of Hydrology, v. 233, p. 102-120.
- Beschta, R.L., R.E. Bilby, G.W. Brown, L.B. Holtby and T.D. Hofstra, 1987. Stream temperature and aquatic habitat: fisheries and forestry interactions. Pages 191-232 In Streamside management: forestry and fishery interactions. E.O. Salo and T.W. Cundy, editors, Contribution No. 57, College of Forest Resources, University of Washington, Seattle, Washington.

- Best, D.W., Kelsey, H., Hagans, D.K., and Alpert, M., 1995, Role of fluvial hillslope erosion and road construction in sediment budget of Garrett Creek, Humboldt County, CA: Redwood National Park, CA, in Nolan, K.M., Kelsey, H.M., and Marron, D.C., eds., *Geomorphic Processes and Aquatic Habitat in the Redwood Creek Basin, Northwestern California*, U.S. Geological Survey Professional Paper 1454, p. M1-M9.
- Best, T.C., 1997, Mass Wasting Assessment, Watershed and Aquatic Wildlife Assessment, unpublished report., Volume Section 4.2, Coastal Forestlands, Ltd., Willits, CA.
- Bisson, P. A., J. L. Nielsen, R. A. Palmason, and L. E. Grove. 1982. A system of naming habitat types in small streams, with examples of habitat utilization by salmonids during low streamflow. Pages 62-73 in Armantrout (1982).
- Bisson, P.A., R.E. Bibly, M.D. Bryant, C.A. Dolloff, G.B. Grette, R.A. House, M.L. Murphy, K.V. Koski, and J.R. Sedell. 1987. Large woody debris in forested streams in the Pacific Northwest: past, present, and future. Pages 143-190 in *Streamside management: forestry and fishery interactions*. E.O. Salo and T.W. Cundy, editors. Contribution No. 57. College of Forest Resources, University of Washington, Seattle, WA.
- Bisson, P.A., T.P. Quinn, S.V. Gregory, and G.H. Reeves. 1992. Best management practices, cumulative effects, and long-term trends in fish abundance in Pacific Northwest river systems. In R.J. Naiman, ed., *Watershed Management: Balancing Sustainability and Environmental Change*. New York: Springer-Verlag.
- Bjornn, T. C., and D.W. Reiser. 1991. *Habitat Requirements of Salmonids in Streams*. American Fisheries Society. Special Publication 19: 83-139.
- Blake, M.C., W.P. Irwin, R.G. Colman, 1967, . Upside-down metaphorphic zonation blueschist facies along a regional thrust in California and Oregon, U.S. Geological Survey Professional Paper 575-C, p. C1-C9
- Bosch, J. M., and J. D. Hewlett. 1982. A review of catchment experiments to determine the effect of vegetation changes on water yield and evapotranspiration. *J. Hydrol.*, 55: 3-23.
- Bozek, M. A., and M. K. Young. 1994. Fish mortality resulting from delayed effects of fire in the Greater Yellowstone Ecosystem. *Great Basin Nat.* 54:91-95.
- Brown, H. A. 1975. Temperature and development of the tailed frog, *Ascaphus truei*. *Comp. Biochem. Physiol.* 50A:397-405.
- Brown, R.A. 1988. Physical Rearing Habitat for Anadromous Salmonids in the Redwood Creek Basin, Humboldt County, California. M.S. Thesis. Humboldt State University, Arcata, CA. 132p.
- Buffington, J.M. and D.R. Montgomery. 1999. Effects of hydraulic roughness on surface texture of gravel-bed rivers. *Water Resources Research* 35(11): 3507-3521.

- Bull, E. L., and B. E. Carter. 1996. Tailed Frogs: distribution, ecology, and association with timber harvest in northeastern Oregon. USDA Forest Service, Res. Pap. PNW-RP-497, Portland, Oregon.
- Bury, R. B. 1968. The distribution of *Ascaphus truei* in California. *Herpetologica*. 24(1):39-46
- Bury, R. B., and P. S. Corn. 1988. Douglas-fir forests in the Oregon and Washington Cascades: relation of the herpetofauna to stand age and moisture. Pages 11-22 in R. C. Szaro, K. E. Severson, and D. R. Patton, technical coordinators. Management of amphibians, reptiles, and small mammals in North America. U.S. Forest Service General Technical Report RM-GTR-166
- Busby, P. J., O. W. Johnson, T. C. Wainwright, F. W. Waknitz, and R. S. Waples. 1993. Status review for Oregon's Illinois River winter steelhead. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-NWFSC-10, 85 p.
- Busby, P. J., T.C. Wainwright, and R.S. Waples. 1994. Status review for Klamath Mountains Province steelhead. NOAA technical memorandum NMFS-NWFSC-19. 130 p.
- Busby, P.J., T.C. Wainwright, G.J. Bryant, L.J. Lierheimer, R.S. Waples, F.W. Waknitz, and I.V. Lagomarsino. 1996. Status review for west coast steelhead from Washington, Idaho, Oregon, and California. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-WFSC-27, 261 p.
- Bustard, D. R. and D. W. Narver. 1975. Aspects of the winter ecology of juvenile coho Salmon (*Oncorhynchus kisutch*) and steelhead trout (*Salmo gairdneri*). *J. Fish Res. Board Can.* 32:667-680.
- Department of Fish and Game (CDFG). 1986. Little River, Humboldt Co., Field Note regarding beach seining by CDFG on Little River estuary. Prepared by David A. McLeod. CDFG, 1986.
- California Division of Mines and Geology, 1997, Factors Affecting Landslides in Forested Terrain: California Division of Mines and Geology Note 50, 5 p.
- Carey, A. B. 1989. Wildlife associated with old-growth forests in the Pacific Northwest. *Natural Areas Journal* 9:151-161.
- Carling, P. A. 1984. Deposition of fine and coarse sand in an open-work gravel bed. *Can. J. Fish. Aquat. Sci.* 41: 263-270.
- Carver, G. and R. B. Burke, 1989, Active convergent tectonics in northwestern California, in K.R. Aalto and G. Harper, eds. Geologic evolution of the northernmost Coast Ranges and western Klamath Mountains, California: Field Trip Guidebook T308, 28th International Geologic Congress, p. 64-82.

- Cashman, S.M., H.M. Kelsey, and D.R. Harden, 1995, Geology of the Redwood Creek Basin, Humboldt County, California: Geomorphic Processes and Aquatic Habitat in the Redwood Creek Basin, Northwestern California. U.S. Geological Survey Professional Paper 1454-B, p. B1-B13.
- Cederholm, C. J. and W. J. Scarlett. 1981. Seasonal immigrations of juvenile salmonids into four small tributaries of the Clearwater River, Washington, 1977-1981. IN: Brannon, E. L. and E. O. Salo, editors. 1981. Salmon and Trout Migratory Behavior Symposium. Washington Department of Natural Resources, Forks, Washington. p. 98-110.
- Cederholm, C.J., Reid, L.M. and Salo, E.O. 1980. Cumulative effects of logging road sediment on salmonid populations in the Clearwater River, Jefferson County, Washington. Presented to the conference Salmon-Spawning Gravel: A Renewable Resource in the Pacific Northwest? Seattle, Washington, October 6-7, 1980, Contribution No. 543, College of Fisheries, University of Washington, Seattle, WA. 35 p.
- Chamberlain, T.W., R.D. Harr and F.H. Everest. 1991. Timber harvesting, silviculture, silviculture and watershed processes. Pages 181-205 in Influences of forest and rangeland management on salmonid fishes and their habitats. W.R. Meehan, editor. Am. Fish. Soc. Spec. Pub. 19, Bethesda, Maryland.
- Chapman, D. W., and E. Knudsen. 1980. Channelization and livestock impacts on salmonid habitat and biomass in western Washington. Transactions of the American Fisheries Society 109:357-363.
- Chapman, D.W. 1988. Critical Review of Variables Used to Define Effects of Fines in Redds of Large Salmonids. Transactions of the American Fisheries Society. 117: 1-21.
- Chen, J.T. 1991. Edge Effects: Microclimatic Pattern and Biological Responses in Old-growth Douglas-fir Forests. Ph.D. Dissertation, University of Washington, Seattle, Washington.
- Chow, V.T. 1964. Handbook of Applied Hydrology, McGraw-Hill Book Company, 1964..
- Claussen, D. L. 1973. The thermal relations of the tailed frog, *ascaphus* *Ascaphus truei*, and the Pacific treefrog, *hHyla regilla*. In Comp. Biochem. Physiol. 137:153. Great Britain: Pergamon Press.
- Coffin, B. A., and R. D. Harr, 1992. Effects of forest cover on volume of water delivery to soil during rain-on-snow. Final report to Sediment, Hydrology and Mass Wasting Steering Committee, Timber-Fish-Wildlife Group, Project 18.
- Coleman, S.M., 1973, The history of mass movement processes in the Redwood Creek basin, Humboldt County, CA: Pennsylvania State University, University Park, paper presented in lieu of MS thesis, 180 p.

- Collins, B.D. and T. Dunne, 1989. Gravel transport, gravel harvesting, and channel-bed degradation in rivers draining the Southern Olympic Mountains, Washington, USA, *Environmental Geology and Water Science*, 13, 213-224.
- Corn, P. S., and R. B. Bury. 1989. Logging in western Oregon: responses of headwater habitats and stream amphibians. For *Ecology Mangmt.* 29:39-57. de Vlaming, V. L., and R. B. Bury. 1970. Thermal selection in tadpoles of the tailed frog, *Ascaphus truei*. *J. Herpetol.* 4:179-189.
- Cruden, D.M., and Varnes, D.J., 1996, Landslide types and processes, in Turner, A.K., and Schuster, R.L. eds., *Landslides, investigation and mitigation: Transportation Research Board, National Research Council, Special Report 247*, p. 36. Cruden and Varnes, 1996 3.3 geology
- Davenport, C.W. 1982-84. Geology and Geomorphic Features Related to Landsliding, Crescent City, Hiouchi, High Divide, Smith River, Leggett, Noble Butte, Childs Hill, Requa and Tan Oak Park 7.5 - minute Quadrangles, Calif. Div. of Mines and Geology, Open File Reports 82-21, 83-4, 83-18, 83-19, 83-40, 83-41, 84-7, 84-8 and 84-17, San Francisco Office.
- Dietrich, W.E., Bellugi, D., and Real de Asua, R., 2000 (in press), Validation of the Shallow Landslide Model, SHALSTAB, for Forest Management, in Wigmosta, M.S., and Burges, S.J., eds., *Influence of Urban and Forest Land Use on the Hydro-Geomorphic response of Watersheds*, American Geophysical Union Water Resources Monograph.
- Dietrich, W.E., Dunne, T., Humphrey, N.F., and Reid, L.M., 1982, Construction of Sediment Budgets for Drainage Basins, In *Sediment Budgets and Routing in Forest Drainage Basins*, Swanson, F.J., R.J. Janda, T. Dunne, D. N. Swanston, eds., USDA Forest Service General Technical Report PNW-141, p. 5-23.
- Dietrich, W.E., Real de Asua, R., Coyle, J., Orr, B., and Trso, M., 1998, A validation study of the shallow slope stability model, SHALSTAB, in forested lands of Northern California; unpublished report prepared for Louisiana-Pacific Corporation, Calpella, CA, p. 16.
- Dietrich, W.E., Willson, C.J., Montgomery, D.R., McKean, J., and Bauer, R., 1992, Channelization thresholds and land surface morphology: *Geology*, v. 20, p. 675-679.
- Dietrich, W.E., Wilson, C.J., Montgomery, D.R., and McKean, J., 1993, Analysis of erosion thresholds, channel networks and landscape morphology using digital terrain model: *Geology*, v. 101, p. 259-278.
- Diller, L. V. and R. L. Wallace. 1996. Distribution and habitat of *Rhyacotriton variegatus* in managed, young growth forests in north coastal California. *J. Herpetol.* 30:184-191.
- Diller, L. V. and R. L. Wallace. 1999. Distribution and habitat of *Ascaphus truei* in streams on managed, young growth forests in north coastal California. *J. Herpetol.* 33:71-79.

- Dunne, T. and L. Leopold. 1978. Water in environmental planning. W. H. Freeman, San Francisco, CA. 818 pp
- Durgin, P.P., Johnston, R.R., and Parsons, A.M., 1988, Causes of erosion on private timberlands in northern California. In: Critical Sites Erosion Study: USDA Forest Service, Pacific Southwest Forest and Range Experiment Station, v. I, p. 50p.
- Evans, W. A., and B. Johnston. 1980. Fish migration and fish passage: a practical guide to solving fish passage problems. USDA Forest Service. Region 5. No. EM-7100-12. 43 p.
- Everest, F. H. 1973. Ecology and management of summer steelhead in the Rogue River. Fishery Res. Rep. No. 7, Oregon State Game Commission. 48p.
- Everest, F.H., R.L. Beschta, J.C. Schrivener, K.V. Koski, J.R. Sedell, and C.J. Cederholm. 1987. Chapter 4. Fine sediment and salmonid production: A paradox. In: Salo, E.O., T.W. Cundy, editors.
- Farro, M.. 1999. Pacific Coast Fish, Wildlife and Wetlands Restoration Association. Interview, November 2, 1999.
- Fausch, K. D. and M. K. Young. 1995. Evolutionarily Significant Units and Movement of Resident Stream Fishes: A Cautionary Tale. American Fisheries Society Symposium. 17:360-370.
- Flosi, G. and F.L. Reynolds. 1994. California salmonid stream habitat restoration manual. IFD, CDFG, Sacramento, CA.
- Flosi, G., S. Downie, J. Hoplain, M. Bird, R. Coey, and B. Collins. 1998. California salmonid stream habitat restoration manual. 3rd ed. IFS, CDFG, Sacramento, CA.
- Furniss, M.J., S. A. Flanagan, and B. McFadin. 2000. Hydrologically-Connected Roads: An Indicator of the Influence of Roads on Chronic Sedimentation, Surface Water Hydrology, and Exposure to Toxic Chemicals. In Stream Notes: To aid in securing favorable conditions of water flows. USDA, Rocky Mountain Research Station. July 2000.
- Furniss, M.J., T.D. Roelofs, and C.S. Yee. 1991. Road construction and maintenance, p. 297-323. In W.R. Meehan [ed.] Influences of forest and rangeland management on salmonid fishes and their habitats. American Fisheries Society Special Publication 19. Bethesda, Maryland. 751 p.
- Gale, D. B., T. H. Hayden, L.S. Harris, and H. N. Voight. 1998. Assessment of Anadromous Fish Stocks in Blue Creek, Lower Klamath River, California, 1994-1996. Yurok Tribal Fisheries Program, Habitat Assessment and Biological Monitoring Division, Technical Report No. 4.

- Gale, D.B., and D.B. Randolph. 2000. Lower Klamath river sub-basin watershed restoration plan. Yurok Tribal Fisheries Program, Klamath CA.
- Gerstung, E.R. 1997. Status of Coastal Cutthroat Trout in California. Sea-Run Cutthroat Trout: Biology, Management, and Future Conservation. Oregon Chapter, Amer. Fish. Soc., 1997 Pgs. 43-56.
- Gibbons, D.R., and E.O. Salo. 1973. An annotated bibliography of the effects of logging on fish of the western U.S. and Canada. Gen. Tech. Rep. PNW-10. U.S. Forest Service, Pacific Northwest Forest and Range Experiment Station, Portland Oregon.
- Gowan, C., M. K. Young, K. D. Fausch and S. C. Riley. 1994. Restricted movement in resident stream salmonids: a paradigm lost? Can. J. Fish. Aquat. Sci. 51: 2626-2637.
- Grant, G.E., F.J. Swanson, and M.G Wolman. 1990. Pattern and origin of stepped-bed morphology in high-gradient streams, western Cascades, Oregon. Geological Society of America Bulletin, 102: 340-352.
- Gregory, R. S., 1993. Effect of turbidity on the predator avoidance behavior of juvenile chinook salmon (*Oncorhynchus tshawytscha*). Can. J. Fish. Aquat. Sci. 50:241-246.
- Hagans, D.K. and W.E. Weaver. 1987. Magnitude, cause and basin response to fluvial erosion, Redwood Creek basin, northern California. 419-428 in Erosion and sedimentation in the Pacific rim. Beschta, R.L., Blinn, T., Grant, G.E., Ice, G.G. and Swanson, F.J. [Eds]. IAHS 165. Washington, DC: International Association of Hydrologic Sciences.
- Halbert, C.L. 1993. "How Adaptive is Adaptive Management? Implementing Adaptive Management in Washington State and British Columbia." Reviews in Fisheries Science, 1(3): 261-283.
- Hallock, R.I., R.F. Elwell, and D.H. Fry, Jr. 1970. Migrations of adult king salmon *Oncorhynchus tshawytscha* in the San Joaquin Delta as demonstrated by the use of sonic tags. Calif. Dept. Fish and Came, Fish Bull. 151.
- Hankin, D.G, 1999. Unpublished MS, a modification of the "Hankin and Reeves" (1988) survey designs, as summarized in detail by Dolloff et al. (1993).
- Harden, D. R., 1998, California Geology. Upper Saddle River, N.J., Prentice Hall, Inc, 427 pp.
- Harden, D.R., Coleman, S.M., and Nolan, K.M., 1995, Mass Movement in the Redwood Creek Basin, Northwest California: Geomorphic processes and aquatic habitat in the Redwood Creek basin, northwestern California. U.S. Geological Survey Professional Paper 1454, p. G1-G11.

- Harden, D.R., H.M. Kelsey, S.D. Morrison, and T.A. Stephens. 1981. Geologic Map of the Redwood Creek Drainage Basin, Humboldt County, California, U.S. Geological Survey, Water Resources Division, Menlo Park, California, Open File Report 81-496.
- Harden, D.R., H.M. Kelsey, S.D. Morrison, and T.A. Stevens, 1982, Geologic Map of the Redwood Creek Drainage Basin, Humboldt County, California: U.S. Geological Survey Water Resources Division Open-File Report 81-496 Map, scale 1:62,500.
- Harr, R. D., 1986, Effects of clear-cut logging on rain-on-snow runoff in western Oregon: A new look at old studies, *Water Resources Research*, 22(7), 1095-1100.
- Harr, R.D. 1977. Water flux in soil and subsoil on a steep forested slope. *J. Hydrology* 33:37-58.
- Harr, R.D., R.L. Fredriksen, and J. Rotacher. 1979. Changes in streamflow following timber harvest in Southwestern Oregon. USDA For. Serv., Res. Paper PNW-249. 22 pp.
- Harr, R.D., W.C. Harper, and J.T. Krygier. 1975. Changes in storm hydrographs after road building and clear cutting in the Oregon Coast Range. *Water Res. Research* 11:436-444
- Hartman, G. F. and T. G. Brown. 1987. Use of small, temporary, floodplain tributaries by juvenile salmonids in a west coast rain-forest drainage basin, Carnation Creek, British Columbia. *Can. J. Fish Aquat. Sci.* 44:262-270.
- Haupt, H.F. 1959. Road and slope characteristics affecting sediment movement from logging roads, *J. Forestry*, 57(5): 329-339.
- Hibbert, A.R. 1967. Forest treatment effects on water yield. Pp. 527-543 In: Sopper, W.E., H.W. Lull (editors), *Forest hydrology. Proceedings of a National Science Foundation advanced science seminar; August 29-September 10, 1965;* University Park, PA. Pergamon Press, New York, NY.
- Hicks, B.J., J.D. Hall, P.A. Bisson and J.R. Sedell. 1991. Responses of salmonids to habitat changes. *American Fisheries Society Special Publication* 19:483-518.
- Higgins, P.T., S. Dobush, and D. Fuller. 1992. Factors in Northern California Threatening Stocks with Extinction. Humboldt Chapter of American Fisheries Society. Arcata, CA. 25pp.
- Howard, C.F. and P. Albro. 1997. Juvenile outmigrant monitoring program. 1997 Report for the West Branch and East Fork of Mill Creek. Unpublished report, Stimson Lumber Company. Crescent City, California.
- Hughes, R. M. and G.E. Davis. 1986. Production of coexisting juvenile coho salmon and steelhead trout in heated model stream communities. *ASTM Spec. Tech, Pub.* 920: 322-337.



- James, S.M. 1982. Mad River Watershed Erosion Investigation, Calif. Dept. of Water Resources, Northern District, June 1982.
- Johnson, M.G. and R.L. Beschta. 1980. Logging, infiltration capacity, and surface erodibility in western Oregon. *J. For.* 78:334-337.
- Johnson, O.W., M.H. Ruckelshaus, W.S. Grant, F.W. Waknitz, A.M. Garrett, G.J. Bryant, K. Neeley, and J.J. Hard. 1999. Status review of coastal cutthroat trout from Washington, Oregon, and California.
- Judson, S. and D. F. Ritter. 1964. Rates of regional denudation in the United States. *Jour. Of Geophys. Research.* Vol. 69(11):3395-3401.
- Keller, E. A., A. MacDonald, T. Tally, and N. J. Merrit. 1995. Effects of large organic debris on channel morphology and sediment storage in selected tributaries of Redwood Creek, Northwestern California. Pp. 1-29, in: Nolan, K. M., H. M. Kelsey, and D. C. Marron, eds. *Geomorphic processes and aquatic habitats in the Redwood Creek basin, northwestern California.* U. S. Geol. Surv. Prof. Pap. 1454-P.
- Keller, E.A. and F.J. Swanson. 1979. Effects of large organic material on channel form and fluvial processes. *Earth Sci. Pro.* 4: 361-380.
- Keller, E.A. and T. Tally. 1979. Effects of large organic debris on channel form and fluvial processes in the coastal redwood environment. Pages 169-197 in *Adjustments of the fluvial system.* D.D. Rhodes and G.P. Williams, editors. Kendall/Hunt, Dubuque, Iowa.
- Kelley, F.R. 1984. Geology and Geomorphic Features Related to Landsliding, Lincoln Ridge, Hales Grove, Piercy, Arcata North and Arcata South 7.5-minute Quadrangles, Calif. Div. of Mines and Geology, Open File Reports, 84-14, 84-15, 84-16, 84-38 and 84-39, San Francisco Office.
- Kelsey, H.M. 1982. Hillslope evolution and sediment movement in a forested headwater basin, Van Duzen River, north coastal California. PNW-141, Pacific Northwest Forest and Range Experiment Station.
- Kelsey, H.M., Coghlan, M., Pitlick, J., and Best, D., 1995, Geomorphic analysis of streamside landslides in Redwood Creek basin, northeastern California, Geomorphic processes and aquatic habitat in the Redwood Creek basin, northwestern California, U.S. Geological Survey Professional Paper 1454, p. J1-J12.
- Kelsey, H.M., M. Coghlan, J. Pitlick, and D. Best. 1995, Geomorphic analysis of streamside landslides in Redwood Creek basin, northeastern California, Geomorphic processes and aquatic habitat in the Redwood Creek basin, northwestern California, U.S. Geological Survey Professional Paper 1454, p. J1-J12.

- Kelsey, H.M., M.A., Madej, J.C. Pitlic, T.M.Coghan, D.W. Best, R. Belding, and P. Stroud. 1981. Sediment sources and sediment transport in the Redwood Creek Basin, a progress report, RNP Technical report No. 3, National Park Service, Arcata, CA.
- Keppeler, E., and D. Brown, 1998. Subsurface Drainage Processes and Management Impacts. USDA Forest Service Gen. Tech. Rep. PSW-GTR-168. 1998.
- Keppeler, E. T. 1998. The summer flow and water yield response to timber harvest. In: Ziemer, Robert R., technical coordinator. Proceedings of the conference on coastal watersheds: the Caspar Creek story, 6 May 1998; Ukiah, California. General Tech. Rep. PSW GTR-168. Albany, California: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture; 35-43. Keppeler, E. T., and Robert R. Ziemer. 1990. Logging effects on streamflow: water yields and summer flows at Caspar Creek in northwestern California. Water Resources Research 26(7): 1669-1679.
- Kilbourne, R.T. 1983-85. Geology and Geomorphic Features Related to Landsliding, Sherwood Peak, Cahto Peak, Longvale, Willits NW, Willits SW, Iron Peak, Laytonville, Fortuna, Hydesville, McWhinney Creek, Korbel and Blue Lake 7.5-minute Quadrangles, Calif. Div. of Mines and Geology, Open File Reports 83-38, 83-39, 84-18, 84-19, 84-20, 84-40, 84-41, 85-1, 85-2, 85-3, 85-5 and 85-6, San Francisco Office.
- King, J.G., and L.C. Tennyson. 1984. Alteration of streamflow characteristics following road construction in north central Idaho. Water Res. Research 20(8): 1159-1163.
- Konecki, J. T., C. A. Woody, and T. P. Quinn. 1995. Critical thermal maxima of coho salmon (*Oncorhynchus kisutch*) fry under field and laboratory acclimation regimes. Can. J. Zool. 73:993-996.
- LaHusen, R.G., 1984, Characteristics of management related debris flows, northwestern California., Symposium on the Effects of Forest Land Use on Erosion and Slope Stability: Honolulu, HI, May 7-11, 1984, p. 139-145.
- Larse, R.W. 1971. Prevention and Control of Erosion and Stream Sedimentation from Forest Roads. In *Proceedings of the Symposium of Forest Land Uses and the Stream Environment*, pp. 76-83. Oregon State University.
- Ledwith, T. 1996. The effects of buffer strip width on air temperature and relative humidity in a stream riparian zone. Watershed Management Council Networker, Summer.
- Lewis, Jack. 1998. Evaluating the impacts of logging activities on erosion and sediment transport in the Caspar Creek watersheds. In: Ziemer, Robert R., technical coordinator. Proceedings of the conference on coastal watersheds: the Caspar Creek story, 6 May 1998; Ukiah, California. General Tech. Rep. PSW GTR-168. Albany, California: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture; 55-69.

- Lisle, T. E. 1989. Sediment transport and resulting deposition in spawning gravels, north coastal California. *Water Resources Research* 25(6): 1303-1319. [Caspar Creek]
- Lisle, T. E., 1986. Effects of woody debris on anadromous salmonid habitat, Prince of Wales Island, southeast Alaska. *North American Journal of fisheries Management* 6:538-550
- Lisle, T. E., 1990. The Eel River, northwestern California; high sediment yields from a dynamic landscape. Pages 311-314, in: M.G. Wolman and H.C. Riggs (ed.), *Surface Water Hydrology*, v. O-1, *The Geology of North America*, Geological Society of America.
- Lisle, T. E., and S.Hilton. 1999. Fine bed material in pools of natural gravel bed channels. *Water Resources Research* 35(4): 1291-1304
- Lisle, T. E., J. E. Pizzuto, H. Ikeda, F. Iseya, and Y. Kodama. 1997. Evolution of a sediment wave in an experimental channel. *Water Resources Research* 33(8): 1971-1981.
- Lisle, T.E. 1987. Using residual depths to monitor pool depths independently of discharge. *USDA For. Ser. Res. Note PSW-394*.
- Louisiana-Pacific Corporation (LP). 1986. Estuary Seining information 1985-86. File from LP archives. Provided by Simpson Timber Company.
- Marron, D.C., Nolan, K.M. and Janda, R.J., 1995. Surface erosion by overland flow in the Redwood Creek basin, northwestern California, effects of logging and rock type. 1454, USGS.
- McCashion, J.D., and Rice, R.M., 1983, Erosion on logging roads in northwestern California: How much is avoidable?: *Journal of Forestry*, v. 81, p. 23-26.
- McCuddin, M. E. 1977. Survival of salmon and trout embryos and fry in gravel-sand mixtures. Master's thesis. University of Idaho, Moscow.
- McDade, M.H., F.J. Swanson, W.A. McKee, J.F. Franklin, and J. Van Sickle. 1990. Source Distances For Coarse Woody Debris Entering Small Streams in Western Oregon and Washington. *Canadian Journal of Forest Research*. 20:326-330.
- McKenzie, D.P. and Morgan, W.J. 1969, Evolution of triple junctions, *Nature*, 224, 5125 p. 124-133
- McLaughlin, R.J., S.D. Ellen, M.C. Blake, Jr., A.S. Jayko, W.P. Irwin, K.R. Aalto, G.A. Carver, and S.H. Clarke, Jr., 2000, *Geology of the Cape Mendocino, Eureka, Garberville, and Southwestern part of the Hayfork 30 x 60 Minute Quadrangles and Adjacent Offshore Area, Northern California*. U.S. Geological Survey Pamphlet to accompany *Miscellaneous Field Studies MF-2336*, p. 2-26.

- Montgomery and Buffington, 1993, Channel classification, prediction of channel response, and assessment of channel condition. Report TFW-SH10-93-002 prepared for the SHAMW committee of the Washington State Timber/Fish/Wildlife Agreement, 84 pgs.
- Montgomery, D.R., and Dietrich, W.E., 1994, A physically-based model for topographic control on shallow landsliding: *Water Resources Research*, v. 30, p. 1153-1171.
- Moore, K. M. S. and S. V. Gregory. 1988. Summer habitat utilization and ecology of cutthroat trout fry (*Salmo clarki*) in Cascade Mountain streams. *Canadian Journal of Fisheries and Aquatic Sciences*. 45:1921-1930.
- Moyle, P.B. 1976. *Inland fishes of California*. University of California Press, Berkeley, California. 405 pp.
- Moyle, P.B., R.M. Yoshiyama, J.E. Williams, and E.D. Wikramanayake. 1995. *Fish species of special concern in California*. IFD, CDFG, Sacramento, CA. 272 pp.
- Murphy and Koski 1989. Input and depletion of woody debris in Alaska streams and Implications for streamside management. *North American Journal of Fisheries Management* 9: 427-436.
- Murphy M. L. and W. R. Meehan. 1991. *Stream Ecosystems*. American Fisheries Society Special Publication 19:139-179.
- Murphy, M.L., Heifetz, J., Johnson, S.W., Koski, K.V. and Thedinga, J.F., 1986. Effects of clear-cut logging with and without buffer strips on juvenile salmonids in Alaskan streams. *Canadian Journal of Fisheries and Aquatic Sciences*, 43: 1521-151533.
- Murphy. M.L. and W.R. Meehan. 1991. Stream ecosystems. Pages 17-46 in *Influences in forest and rangeland management on salmonid fishes and their habitats*. W.R. Meehan, editor. Amer. Fish Soc. Spec. Pub. 19.
- Myers, J.M., R.G. Kope, G.J. Bryant, D. Teel, L.J. Lierheimer, T.C. Wainwright, W.S. Grand, F.W. Waknitz, K. Neely, S.T. Lindley, and R.S. Waples. 1998. Status review of chinook salmon from Washington, Idaho, Oregon, and California. U.S. Dept. Commer., NOAA Tech. Memo. NMFS-NWFSC-35, 443 p.
- Naiman, R. editor. 1992. *Watershed Management: Balancing Sustainability and Environmental Change*. Springer-Verlag. 148 pp
- National Marine Fisheries Service. 1997. *Aquatic properly functioning condition matrix*. NMFS, Southwest Region, Northern California Area Office, Santa Rosa and USFWS, Arcata, California.
- National Marine Fisheries Service. 1999. *Generic Salmonid Conservation Measures for Forestry Activities for a Short-Term HCP*, National Marine Fisheries Service, July 1999

- National Marine Fisheries Service (NMFS). 2001. Status review update for coho salmon (*Oncorhynchus kisutch*) from the central California coast and the California portion of the southern Oregon/northern California coasts evolutionarily significant units. Southwest Fisheries Science Center, Santa Cruz Laboratory. 12 April 2001 revision.
- NCASI (National Council of the Paper Industry for Air and Stream Improvement, Inc.). 1999. Scale considerations and the detectability of sedimentary cumulative watershed effects. Technical Bulletin No. 776. Research Triangle Park, N.C., National Council of the Paper Industry for Air and Stream Improvement, Inc.
- Nehlsen, W., J.E. Williams and J.A. Lichatowich. 1991. Pacific salmon at the crossroads: Stocks at risk from California, Oregon, Idaho and Washington. Fisheries, Am. Fish. Soc. 16(2): 4-21.
- Newcombe, C.P. and D.D. MacDonald. 1991. Effects of Suspended Sediments on Aquatic Ecosystems. North American Journal of Fisheries Management. 11: 72-82.
- Newcombe, C.P. and J.O.T. Jensen. 1996. Channel suspended sediment and fisheries: A synthesis for quantitative assessment of risk and impact. North American Journal of Fisheries Management 16: 693-727.
- Nickelson, T.E., J.D. Rogers, S.L. Johnson and M.F. Solazzi. 1992. Seasonal changes in habitat use by juvenile coho salmon (*Oncorhynchus kisutch*) in Oregon coastal streams. Can. J. Fish. Aq. Sci. 49: 783-789.
- Nickelson, T. E. and P.W. Lawson, 1998. Population viability of coho salmon, *Oncorhynchus kisutch*, in Oregon coastal basins: application of a habitat-based life cycle model Canadian Journal of Fisheries and Aquatic Sciences, 55: 2383-2392.
- Nickelson, T.E., J.W. Nicholas, A.M. McGie, R.B. Lindsay, D.L. Bottom, R.J. Kaiser, and S.E. Jacobs. 1992. Status of anadromous salmonids in Oregon coastal basins. Oregon Department of Fish and Wildlife, Portland, Oregon.
- Nussbaum, R. A. and C. K. Tait. 1977. Aspects of the life history and ecology of the Olympic salamander, *Rhyacotriton olympicus* (Gaike). Am. Midl. Nat. 98:176-199.
- O'Connor, M.D. and Harr, R.D. 1994. Bedload transport and large organic debris in steep mountain streams in forested watersheds on the Olympic Peninsula, Washington. Final Report to Washington Department of Natural Resources and Timber/Fish/Wildlife, Olympia, Washington. TFW-SH7-94-001.
- Ogle, B.A. 1953. Geologic Map of the Eel River Valley Area, California, Div. of Mines, Bulletin 164.
- PWA, 1998, Sediment source investigation and sediment reduction plan for the North Fork Elk River watershed, Humboldt County, CA., Unpublished technical report for Pacific Lumber Company.

- PWA, 1999a, Sediment Source Investigation and Sediment Reduction Plan for Freshwater Creek Watershed, Humboldt County, CA, Technical report prepared for Pacific Lumber Company, Scotia, CA, by Pacific Watershed Associates, p. 94.
- PWA, 1999b, Sediment Source Investigation and Sediment Reduction Plan for the Jordan Creek Watershed, Humboldt County, CA, Pacific Watershed Associates, Technical report prepared for The Pacific Lumber Company, Scotia, CA, January, 1999, 63p p.
- Pyles, M. R.; K. Mills and G. Saunders, 1987. Mechanics and stability of the Lookout Creek earth flow. Bulletin of the Association of Engineering Geologists. 24(2): 267-280.
- Raines, M.A., and Kelsey, H.M., 1991, Sediment budget for the Grouse Creek basin, Humboldt County, CA., USDA, USDA Forest Service, Six Rivers National Forest, Eureka, CA.
- Raudkivi, A.J., 1990, Loose Boundary Hydraulics, Pergamon Press, Elmsford, NY.
- Redwood National and State Parks (RNSP). 1994. Field data of revisit of 1981 Redwood Creek thesis sites. In files of Redwood National and State Parks, South Operations Center, Orick, California. Project funded by USFS Redwood Sciences Laboratory.
- Redwood National and State Parks (RNSP). 1995-1996. Field data of barrier survey of Redwood Creek tributaries. In files of Redwood National and State Parks, South Operations Center, Orick, California. Project funded by USFS Redwood Sciences Laboratory.
- Reeves, G.H., F.H. Everest, and J.D. Hall. 1987. Interactions between the redbside shiner (*Richardsonius balteatus*) and the steelhead trout (*Salmo gairdneri*) in western Oregon: the influence of water temperature, Can. J. Fish. Aqu. Sci. 44: 1603-1613.
- Reid L. M. and S. Hilton., 1998, Buffering the Buffer. USDA Forest Service Gen. Tech. Rep. PSW-GTR-168.
- Reid, L.M., and T. Dunne, 1984. Sediment production from forest road surfaces. Water Resources Research 20: 1753-1761.
- Reiser, D. W. and R. G. White. 1988. Effects of two sediment-size classes on steelhead trout and Chinook salmon egg incubation and juvenile quality. North American Journal of fisheries Management 8:432-437.
- Rice, R. M., and P. A. Datzman. 1981. Erosion associated with cable and tractor logging in northwestern California. In: Timothy R. H. Davies and Andrew J. Pearce (eds.), Erosion and Sediment Transport in Pacific Rim Steeplands, Proceedings of the Christchurch Symposium, 25-31 January 1981, Christchurch, New Zealand. Int. Assn. Hydrol. Sci. Pub. No. 132: 362-374.

- Rice, R.M., and Lewis, J., 1991, Estimating erosion risks associated with logging and forested roads in northwestern California.: Water Resources Bulletin, v. 27, p. 809-818.
- Rice, Raymond M., Forest B. Tilley, and Patricia A. Datzman. 1979. A watershed's response to logging and roads: South Fork of Caspar Creek, California, 1967-1976. USDA Forest Service Research Paper PSW-146. Berkeley, California: Pacific Southwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture. 12 p.
- Richards, K.S., 1982. Rivers: form and process in alluvial channels. Methuen. London.
- Ristau, Donn. 1979. Geologic Maps of Twenty-six 15-minute Quadrangles in Del Norte, Humboldt, Trinity and Siskiyou Counties, Calif. Dept of Forestry Title II Geologic Data Compilation Project. Scale 1:62,500.
- Robards, T., 1999. Instructions for WLPZ canopy/surface cover compliance sampling under Forest Practice Rules. Calif. Dept. of Forestry and Fire Protection – Forest Practices, Sacramento, CA. 2 pages.
- Schmidt, K.M. Roering, J.J., Stock, J.D., Dietrich, W.E., Montgomery, D.R., and Schaub, T. (in press) Root cohesion variability and susceptibility to shallow landsliding in the Oregon Coast Range. Canadian Geotechnical Journal.
- Sedell, J.R., F. J. Swanson, and S.V. Gregory. 1984. Evaluating fish responses to woody debris. Pages 222-245 in Proceedings, symposium on propagation, enhancement and rehabilitation of anadromous salmonid populations and habitat in the Pacific Northwest, T.J, T.J. Hassler, editor. Ca. Coop. Fish Res. Unit, Humboldt State University, Arcata, California.
- Shaw T. A. and C. L. Jackson. 1994. Little River juvenile salmonid outmigration monitoring 1994. U. S. Fish and Wildlife Service, Coastal California Fish and Wildlife Office, Arcata, California.
- Shirvell, C. S. 1994. Effect of changes in streamflow on the microhabitat use and movements of sympatric juvenile coho (*Oncorhynchus kisutch*) and chinook salmon (*O. tshawytscha*) in a natural stream. Can. J. Fish. Aquat. Sci. 51:1644-1652.
- Sidele, R.C., Pearce, A.J., and O'Loughlin, C.L., 1985, Hillslope stability and land use, Am. Geophysical Union, 140 p.
- Sigler, J. W., T. C. Bjornn, and F. H. Everest. 1984. Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150.
- Spence, B. C., G. A. Lomnický, R. M. Hughes, R. P. Novitzki, 1996. An ecosystem approach to salmonid conservation. TR-4501-96-6057. Corvallis, OR. Man Tech Environmental Research Services Corporation.

- Steele, J. and G. Stacey, 1994, 1994. Coho salmon habitat impacts: a qualitative assessment technique for registered professional foresters. CDFG, Draft #2. 31 pp.
- Strand, R.G., 1963, Geologic Map of California, Weed Sheet, scale 1:250,000: California Division of Mines and Geology.
- Stuart, J.D. 1987. Fire history of an old-growth forest of *Sequoia sempervirens* (Taxodiaceae) in Humboldt Redwoods State Park, California. Madrono 34(2):128-141.
- Stuart, J.D. and L. Fox. 1993. Humboldt Redwoods State Park unit prescribed fire management plan. Arcata, CA: California Department of Parks and Recreation. 239 p.
- Sullivan, K., J. Tooley, K. Doughty, J.E. Caldwell, and P. Knudsen. 1990. Evaluation of prediction models and characterization of stream temperature regimes in Washington. Timber/Fish/Wildlife Rep. No. TFW-WQ3-90-006. Washington Dept. Nat. Resources, Olympia, Washington. 224 pp.
- Sullivan, K., T. E. Lisle, C. A. Dolloff, G. E. Grant, and L.M. Reid. 1987. Stream channels; the link between forests and fishes. Pages 39-97 in Salo and Cundy (1987).
- Swanson, F. J., T. K. Kratz, N. Caine, and R. G. Woodmansee. 1988. Landform effects on ecosystem patterns and processes. Bioscience 38: 92-98.
- Swanson, F.J., and Dryness, C.T., 1975, Impact of clearcutting and road construction on soil erosion by landslides in the western Cascade Range, Oregon.: Geology, v. 3, p. 393-396.
- Swanston, D. N. 1981. Creep and earthflow erosion from undisturbed and management impacted slopes of the Coast and Cascade Ranges of the Pacific Northwest, U.S.A. In: Erosion and Sediment Transport in Pacific Rim Steeplands. I.A.H.S. Publ. No. 132:76-94.
- Swanston, D. N. and F. J. Swanson, 1976. Timber harvesting, mass erosion, and steepland forest geomorphology in the Pacific Northwest. In: Coates, Donald R., ed. Geomorphology and engineering. Stroudsburg, PA: Dowden, Hutchinson & Ross, Inc.: 199-221.
- Swanston, D.N. 1971. Principal mass movement processes influenced by roadbuilding, logging and fire. Pages 29-40 in Krygier and Hall (1971).
- Swanston, D.N. 1991. Natural processes. Pp. 139-179 In: W.R. Meehan (editor), Influences of Forest and Rangeland Management on Salmonid Fishes and Their Habitats. Am. Fish. Soc. Special Publication No. 19.
- Tagart, J. V. 1976. The survival from egg deposition to emergence of coho salmon in the Clearwater River, Jefferson County, Washington. Master's thesis. University of Washington, Seattle.



- Tappel, P. D. and T. C. Bjornn. 1983. A new method of relating size of spawning gravel to salmonid embryo survival. *North American Journal of Fisheries Management* 3: 123-135.
- Taylor, A.H. and C.N. Skinner. 1998. Fire history and landscape dynamics in a late-successional reserve, Klamath Mountains, California, USA. *Forest Ecology and Management* 111:285-301.
- Transportation Research Board. 1996. Landslides: Investigation and Mitigation, Special Report 247. Turner, A.K. and Schuster, R.L. (Eds.) National Research Council, National Academy Press, Washington D.C., 673 p.
- Triska, F.J., V.C. Kennedy, R.J. Avanzino and B.N. Reilly. 1983. Effect of simulated canopy cover on regulation of nitrate uptake and primary production by natural periphyton assemblages. pp 129-159 In: T. Fontaine and S. Bartell (eds.), *Dynamics of Lotic Ecosystems*, Ann Arbor Science Publishers, Michigan.
- U.S. Department of Commerce, NOAA Technical Memorandum NMFS-NWFSC-37. 292 p.
- US Fish and Wildlife Service. 1967. Letter to District Engineer, San Francisco District, Corps of Engineers. San Francisco, CA. 1967.
- Van Sickle, J. and S.V. Gregory. 1990. Modeling Inputs of Large Woody Debris to Streams from Falling Trees. *Canadian Journal of Forest Research*. 20:1593-1601.
- Voight, H. N. and D. B. Gale. 1998. Distribution of fish species in tributaries of the lower Klamath River: an interim report for FY 1996 Yurok Tribal Fisheries Program, Klamath, CA. 71 p. plus appendices.
- Waananen A. O. and J. R. Crippen. 1997. Magnitude and frequency of floods in California. U. S. Geological Survey, Water-Resources Investigations 77-21.
- Wagner, D.L. and G.J. Saucedo. 1987. Geologic Map of the Weed Quadrangle, Regional Geologic Map Series, Map No. 4A, Calif. Div. of Mines and Geology.
- Walters, C. 1986. Adaptive management of renewable resources. Macmillan, New York.
- Weaver, W.E. and D.K. Hagans, 1994. Handbook for forest and ranch roads; a guide for planning, designing, constructing, reconstructing, maintaining and closing wildland roads. Pacific Watershed Associates, Arcata, California. 190 pp.
- Weitkamp, L. A., T. C. Wainwright, G. J. Bryant, G. B. Milner, D. J. Teel, R. G. Kope, and R. S. Waples. 1995. Status review of coho salmon from Washington, Oregon, and California. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-NWFSC-24, 258 pp.
- Welch, E. J. M. Jacoby & C. W. May. 1998. Stream quality. In R. J. Naiman & R. E. Bilby (eds.). *River Ecology and Management: Lessons from the Pacific Coastal Ecoregion*. Springer-Verlag. New York: 67-92.

- Welsh, H. H., Jr., and A. J. Lind. 1996. Habitat correlates of the southern torrent salamander, *Rhyacotriton variegatus* (Caudata: Rhyacotritonidae) in northwestern California. *Journal of Herpetology* 30:385-398.
- Welsh, H.H., Jr. 1990. Relictual amphibians and old-growth forests. *Conservation Biology* 4: 309-319.
- Welsh, H.H., Jr. 1992. Population ecology of two relictual salamanders from the Klamath Mountains of Northwestern California, pp. 419-437, In McCullough, D.R., and R.H. Barrett (eds.), *Wildlife 2001: Populations*. Elsevier Applied Science, New York.
- Welsh, H.H., Jr., G. R. Hodgson, and B. C. Harvey, 2001. Distribution of juvenile coho salmon in relation to water temperatures in tributaries of the Mattole River, California. *North American Journal of Fisheries Management* 21:464-470.
- Weseloh, T. 1999. California Trout. Interview, November 2, 1999.
- Wood, P.J. and Armitage, P.D. (1997). Biological effects of fine sediment in the lotic environment *Environmental Management*, 21, 203-217.
- Woodward-Clyde Consultants, 1980, Evaluation of the potential for resolving the geologic and seismic issues at Humboldt Bay Power Plant Unit No. 3, Report prepared for Pacific Gas and Electric Company, summary report and appendices.
- Wright, K.A., K.H. Sendek, R.M. Rice, and R.B. Thomas. 1990. Logging effects on streamflow: storm runoff at Caspar Creek in northwestern California. *Water Res. Research* 26(7):1657-1667.
- Yang, C.T. 1996. *Sediment Transport: Theory and Practice*. McGraw Hill, 396 p.
- Yoshinori, T., and Osamu, K. 1984. Vegetative influences on debris slide occurrences on steep slopes in Japan In Symposium on effects of forest land use on erosion and slope stability. East-West Center, Honolulu. pp. 63-72.
- Young, J.C. 1978. Geology of the Willow Creek Quadrangle, Humboldt and Trinity Counties, California, Calif. Div. of Mines and Geology, Map Sheet 31.
- Young, K.A., S. G. Hinch and T. G. Northcote. 1999. Status of resident coastal cutthroat trout and their habitat twenty-five years after riparian logging. *North American Journal of Fisheries Management* 19:901-911.
- Ziemer, Robert R. 1998. Flooding and stormflows. In: Ziemer, Robert R., technical coordinator. Proceedings of the conference on coastal watersheds: the Caspar Creek story, 6 May 1998; Ukiah, California. General Tech. Rep. PSW GTR-168. Albany, California: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture; 15-24.